

We claim:

1. A liposome composition comprising DOTAP and at least one cholesterol or cholesterol derivative.

2. The liposome composition according to claim 1, further comprising a biologically-active agent, thereby forming a sandwich liposome.

3. The sandwich liposome composition according to claim 2 wherein the composition has a  $\rho$  value equal to 2.

4. The liposome composition according to claim 2, wherein the biologically-active agent is a nucleic acid.

5. The liposome composition according to claim 4 further comprising, adding a targeting ligand thereby decorating exterior surface of said sandwich liposome with the ligand.

6. A DNA-sandwich liposome composition comprising a structure having lipid bilayers and DNA molecules positioned between two or more sandwich liposomes, wherein  $\rho = 2$  and a size of 200 - 450 nm.

7. A DNA-sandwich liposome comprising DNA, DOTAP and at least one of a cholesterol or cholesterol derivative.

8. The DNA-sandwich liposome of claim 7 further comprising one or more targeting ligands.

9. A liposome produced by the steps comprising:  
i) heating DOTAP and at least one cholesterol or cholesterol derivative forming heated lipid

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components;

ii) sonicating said heated lipid components; and  
iii) extruding lipid components sequentially through filters of decreasing pore size.

10. The liposome of claim 9 further comprising a sandwich liposome, produced by adding a biologically-active agent to the liposomes.

11. The liposome of claim 10 wherein the biologically active agent is DNA, thereby forming a DNA sandwich liposome.

12. The liposome according to claim 11 further comprising, adding a targeting ligand thereby decorating the exterior surface of said DNA-sandwich liposome with the ligand.

13. The liposome according to claim 11 further comprising a second biologically active agent.

14. The liposome of claim 11 wherein the DNA, DOTAP and at least one cholesterol or cholesterol derivative carry a  $\rho$  value of 2.

15. A method for preparing invaginated liposomes comprising the steps of:

i) heating a mixture of DOTAP and at least one of cholesterol or cholesterol derivative forming heated lipid component;  
ii) sonicating said heated lipid components; and  
iii) extruding lipid components sequentially through filters of decreasing pore size forming invaginated liposomes.

16. The method of claim 15, further comprising adding DNA to said invaginated liposomes forming DNA-sandwich liposomes.

*ad B2 J*